Myth or Reality: Is Our AAR Process Fixing the Problem, Or Fixing the Blame?

A Monograph
by

Major Stephen R. Lanza

Field Artillery

MENS EST CLAVIS VICTORIA

School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

First Term AY93–94

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 17 DECEMBER 1993	3. REPORT TYPE AND DATES COVERED

4. TITLE AND SUBTITLE Myth or Reality: Is Our AAR Process Fixing the Problem, or Fixing the Blame?

5. FUNDING NUMBERS

6. AUTHOR(S) MAJ Stephen R. Lawson, FA.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
School of Advanced Military Studies
ATTN: ATZL- SWV
FT. Leavenworth, Ks. 66027-6900

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release
Distribution Unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

14. SUBJECT TERMS After Action Review (AAR) National Training Center (NTC) Cybernetic Domain TRAINING

15. NUMBER OF PAGES 52

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNC	UNC	UNC	

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Major Stephen R. Lanza

Title of Monograph: <u>Myth or Reality: Is Our AAR Process Fixing the Problem, or Fixing the Blame</u>?

Approved by:
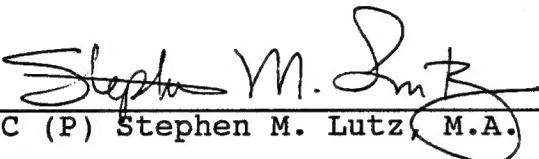
_____ Monograph Director
LTC (P) Stephen M. Lutz, M.A.
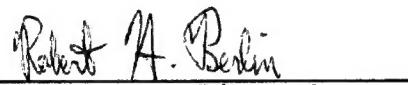
_____ Acting Director,
Robert H. Berlin, Ph.D   School of Advanced
                                    Military Studies

_____ Director, Graduate
Philip J. Brookes, Ph.D   Degree Program

Accepted this <u>17th</u> day of <u>December</u> 1993

ABSTRACT

MYTH OR REALITY: IS OUR AAR PROCESS FIXING THE PROBLEM, OR FIXING THE BLAME? by MAJ Stephen R. Lanza, USA, 52 pages.

FM 25-101 defines the After Action Review (AAR) as "a review of training that allows soldiers, leaders, and units to discover for themselves what happened during training, why it happened, and determining solutions to correct the problem." The AAR has become a recognized tool to provide the necessary information and feedback for the units to improve their performance through self-discovery. Yet based on recurring training deficiencies and the self-assessment of the unit, this goal is oftentimes not met.

The purpose of this monograph is to determine whether the AAR is obtaining the desired results as specified in FM 25-100 and 25-101. The study focuses on a critical examination of our AAR process and the dangerous ramifications when the intent of doctrine is not met. The analysis and evidence presented will depict the conditions that result from this, culminating in a tendency to place the blame on an individual vice fixing the problem.

The methodology begins by examining the historical perspective of the AAR, drawing information from the works of Carl von Clausewitz and Aleksandr Svechin. Next, the study analyzes the effects of the AAR when the process goes awry. Case studies depict the results of an AAR that becomes the mechanism to place the blame on a particular individual rather than addressing the need to fix the problem. Using the "man in the dock" syndrome developed by Eliot Cohen and John Gooch in their book Military Misfortune, the significance of this problem is portrayed. Synthesizing the cybernetic domain of battle provides a framework for the conduct of the AAR to optimize it's doctrinal intent. The Brigade Fire Support Officer is used as a vehicle to examine where this problem lies and how the cybernetic technique can resolve it.

The monograph concludes that doctrine for the AAR is sound on the desired end-state. Yet it lacks specifity on how to ensure that the implemented training methodology improves performance. As a result, reoccurring training deficiencies among units pose the question whether our training process is enhancing and reinforcing learning. Using the cybernetic technique to conduct AAR's provides a solution to this problem. In this manner lessons learned and their solutions can adapt to changes in personnel, technology, and the organizational structure of the unit during their training.

TABLE OF CONTENTS

"These are hard times in which a
genius would wish to live. Great
necessities call forth great
leaders ... therefore it is said
that one may know how to win but
cannot necessarily do so."[1] - Sun Tzu

At some point in a military career a soldier has, or will soon experience the tightening in the stomach and the dryness of mouth as the senior observer controller (OC) announces, "Good afternoon and welcome to your After Action Review. (AAR)" After two hours of AAR self-discovery, often interpreted as bloodletting, one's interest usually peaks only when the pluses and minuses of the Battlefield Operating System (BOS) are depicted on the screen. Should this be the case, perhaps there are some flaws in the AAR process that is normally designed to help enhance a unit's readiness posture.

If flaws in our AAR process exist it could stem from ineffective doctrine, or the inability of the OCs and units in the field to apply doctrine correctly. This could diminish the viability of the AAR as a sound approach to enhance tactical proficiency. This would severely impact on the desired end-state of the AAR to better prepare units to fight, survive, and win on the modern battlefield.

U.S. Army Field Manual (FM) 25-101 Battle Focused Training, defines the AAR as "a review of training that allows soldiers, leaders, and units to discover for themselves what happened during the training and why."[2] The intent of the AAR is to help the commander objectively evaluate his unit and assist the Army in

1

improving overall combat readiness. Providing the means to link performance, feedback, and training, the AAR has become a recognized tool enabling units to improve their performance through self-discovery.[3]

However, comments by the Commanding General of the National Training Center (NTC) indicate that commanders undergoing training are concerned more with failing than improving their performance.[4] The view that units sometimes perceive the NTC as a witchhunt is corroborated by others at the NTC.[5] These views may suggest that the doctrinal intent of the AAR is not universally accepted in the field.

Utilizing training centers such as the National Training Center (NTC) at Fort Irwin, California the Army devotes considerable effort to provide a vehicle for training units for combat. Yet if the intent of the AAR is misconstrued and deviates from a professional dialogue of showing cause and effect, it becomes a mechanism to assess success or failure. Based on recurring unit deficiencies depicted in Lessons Learned from the Center for Army Lessons Learned (CALL), and the self-assessment of individual "players", the intent of the AAR is oftentimes not met.[6] Whether the problem is the presentation of the AAR by the OCs or interpretation by the unit, sufficient anxiety exists in today's Army to pose the question of the doctrinal implications of improperly conducted AARs.

The impact of a poorly administered AAR in a peacetime training environment might be staggering. Units could be

unprepared for the future challenges of combat, or possibly choose to operate differently in training as opposed to a combat environment. By exploring this issue, the monograph determines whether the AAR obtains the desired results specified by doctrine. Further analysis examines whether the problem revolves around the conduct of the AAR, or the validity of our doctrine. If U.S. Army doctrine is sound on the desired end-state that it needs to achieve, it may lack the specificity on how to insure that the implemented training methodology improves performance. This could result in OCs and units becoming enamored with the process, vice the substance, of the AAR.

The analysis and evidence presented in the paper depict the conditions which often result in the human tendency of fixing the blame for a particular situation as opposed to resolving the problem. To gain insight into the issue this monograph first looks at a potential theoretical basis for the AAR from the works of Carl von Clausewitz and Aleksandr Svechin.

After establishing this foundation, a critical analysis determines the effects of the AAR when it goes awry. When the AAR "peels back the onion" beyond the point of fixing the problem and pins the blame on an individual, it develops into a critique that is doctrinally unsound.[7] If the perception of the unit is that the AAR specifically fixes the blame for a problem, it could result in one individual assuming responsibility for something which spans the entire organizational structure.

The individual could end up becoming what Eliot Cohen and John Gooch, authors of the book <u>Military Misfortune</u>, refer to as "the man in the dock."[8] Due to the temptation to explain military errors in terms of human error, tactical problems that occur within an organization are often placed on an individual. This results in the symptoms of a problem being addressed rather than its causes.[9] Therefore, the AAR must be a critical process that links the BOS, training, and standards within the whole organization. Focusing on only part of this equation is not only detrimental to the unit, but also poses a credibility problem for the OC conducting the AAR.

The critical examination of the deficiencies of the AAR process dictate a solution that can hold the participants accountable to the established doctrine. Using a new and different approach, "cybernetics" may offer such a solution. The theory of cybernetics, studied extensively in the School of Military Studies (SAMS) at Fort Leavenworth, Kansas, is a reliable command system that processes information to minimize the uncertainty, ambiguity, fog, and friction of combat. The components of the cybernetic domain are organization, command, control, and communication and information. Together, they combine with the human element of battle to provide an effective method for resolving unit training deficiencies and meeting the intent of doctrine.[10]

Focusing on tactical operations at the brigade level, the monograph uses the Brigade Fire Support Officer (FSO), who is responsible for coordinating and synchronizing the effects of all indirect fires for the brigade, as the vehicle within the

4

cybernetic domain to depict the impact of "the man in the dock."

The premise of how the FSO ends up "in the dock" stems from two issues beginning with the inability of the OC to focus the AAR across the spectrum of the cybernetic domain. The senior OC responsible for the AAR, normally a lieutenant colonel, often becomes fixated on one issue and fails to link the training deficiency to other systems or events during the battle. When this occurs, the responsible individual for the training deficiency becomes the focal point for the discussion, and indirectly assumes responsibility for the unit's failure.

Another concern could be the unit's inability to apply the lessons learned across this spectrum. In some cases units are presented with a clear picture of the organizational training deficiency, yet choose to ignore the organizational problems. In this situation they often single out an individual as the root cause of the problem. In either case the FSO could become responsible for a problem that spans the cybernetic domain of brigade operations. An actual AAR scenario and the lessons learned from it are presented to further illustrate this problem.

The significance of this monograph is that it challenges leaders at all levels to recognize that the best training diagnosis is useless unless sound remedies for training deficiencies are established. Only then can we reduce the percentage of recurring training deficiencies in our units.

HISTORICAL PERSPECTIVE

The After Action Review was designed to provide feedback for all aspects of training. By soliciting professional discussion under the guidance of an experienced, detached observer, the AAR is now the primary tool in the U.S. Army for coaching, teaching, and enhancing the combat readiness of our forces. Through the use of this dialogue, the AAR provides the structure which enables units, through self-discovery, to discover what and why an event happened, as well as how to do it differently in the future.[11]

Parallels to our AAR process can be drawn from the works of such men as Carl von Clausewitz, noted for his "critical" analysis technique, and Aleksandr Svechin, a Soviet lieutenant colonel whose incisive account of the Imperial Army's successes and failures against the Japanese was the precursor for the modern critique. It is possible that their studies provided some theoretical basis for what goes into the modern AAR.

The Role of Clausewitz

Clausewitz believed it was important to trace events back to their causes and used the critical analysis technique to accomplish this goal.[12] The conduct of our AARs also use this method to ascertain cause and effect when discussing lessons learned with the training unit. Yet Clausewitz first used the term "cause and effect" by linking it to the "means and ends" on the battlefield. Clausewitz wanted to ensure that we would not use some preconceived notion or checklists of how battles should be fought.

The significance of Clausewitz's critical analysis believed that theoretical truths (which was the equivalent of doctrine at that time) could be tied to the actual event that occurred on the battlefield.[13] Clausewitz was so vigilant in his regard for the importance of critical analysis that he states, "having established a criteria for theory, we must now establish one for critical analysis as well."[14] This criteria could possibly become a starting point for an assessment by a critique, and eventually evolve into feedback, and the AAR process.

It is readily apparent that Clausewitz was a true visionary in his ability to assess the need to learn from past experiences to support changes for the future. The techniques that are used today at the NTC are in close proximity with the tenets of critical analysis advocated by Clausewitz. Yet, in addition to offering us a glimpse into the future on how to train, Clausewitz also cautions us on the repercussions and ramifications when misuse of critical analysis fails to foster tactical development.

To understand this point it is imperative to state the basic premise for Clausewitz's work that, "the nature of war is revealed through historical experience."[15] Without this historical experience there is no critical analysis, hence no AAR. Thus, historical experience, whether in combat or training, is the basis for the development and conduct of the AAR. By basing critical analysis on factual occurrences, we can draw lessons from practical experience, as opposed to philosophic or theoretical views.

The use of this firsthand data is critical since it establishes a sound factual basis to conduct AARs. This results in minimizing any disparity or gaps that could have transpired in analyzing these historical events. In Clausewitz's view, those who fail to capitalize on their ability to base their comments on known facts often must revert to "sketching known facts to explain events."[16] Whether it was the Field Marshall in Clausewitz's time, or the OC today at the NTC, factual interpretation of battlefield observations is the focal point to improve a unit's warfighting skills.

Clausewitz's vision into the future addressed techniques for those individuals who conduct this critical analysis, while also cautioning them on its incorrect application. There are numerous similarities between Clausewitz's precautionary guidance and the doctrinal techniques taught to the OC's at the training centers. Clausewitz states, "The function of criticism would be missed entirely if criticism were to degenerate into the mechanical application of theory."[17] Therefore, the OC must have the technical and doctrinal skills to not only apply doctrine, but also to understand the effects of tactics, techniques, and procedures (TTP) in its application. Analysis which solely states the player did not adhere to doctrine does not provide sufficient resolution for correcting that problem in the future.

Clausewitz further states, "The critic must avoid implying that he could have done better...therefore the critic must put himself in the place of the participant."[18] This point is vital

in the conduct of AARs. Failure to adhere to Clausewitz's principles can create an adversarial relationship polarizing the positive impact between the OC, the unit, and the effects of the AAR. An OC that can identify with the needs of the player is more likely to get him to express his views on the battle, thereby creating a professional dialogue for the AAR.

Clausewitz concludes, "One cannot, after all, not [sic] condemn a method without being able to suggest a better alternative."[19] This is the hardest technique for the OC to learn due his own experiences as an Army Readiness Training Evaluation Program (ARTEP) participant. The OC must continually stay appraised of the conditions on the battlefield to develop key issues that support the teaching points he will bring out in the AAR.

Oftentimes the ill-prepared OC evaluates issues that are not only obvious to the player, but result in simple "yes" or "no" answers. Therefore, it is imperative that the OC uses initiative and communicative skills to enhance the professional dialogue in the AAR. Failure to comply with these procedures results in the OC losing control of the AAR, diminishing his personal interaction, and destroying his credibility during the training session.

The Role of Svechin

The work of Svechin supported the evolution of Clausewitz's critical analysis into the modern day AAR process. Svechin's intent was to study and analyze the reconstructed experiences of soldiers in battle to gain valuable lessons which they could apply

to the future. When studying Svechin one must be cognizant of the problems he experienced, both politically and militarily, in a documented work that criticized the Soviet Imperial Army's performance in the Russo-Japanese War from 1904 to 1905.

Svechin went right to the source of the issue, analyzing the battles and the views of the individual soldier. His methods were designed to have an immediate impact on the future battlefield in the operational and tactical arena. Using historical experiences as his parameters, Svechin provided answers to the documented mistakes that occurred on the battlefield to preclude them from reoccurring.

Svechin's view of analyzing battles was based on the axiom that criticism and experience go hand in hand.[20] His theory on the conduct of battlefield analysis was to broaden it's depth and scope, only after accounting for the factual premise of the event. This methodology is reminiscent of studies conducted by Hans Delbruk, the German military theorist of the late 1800's whose application of the scientific method caused a fundamental change in the study of military history. Delbruk views on the importance of political and military coordination were used in his criticism of Germany during World War I.[21]

The concept of "peeling back the onion", analogous of a process to determine why an event occurred, can be attributed to Svechin. However, while Svechin sought to establish a mechanism to get to the cause of a problem, his methods were tempered by the belief that hard and fast conclusions concerning doctrine could not

be based on contemplation and inferences.[22] In the same context an OC must recognize the distinction between theory and real life in his ability to apply tactics, techniques, and procedures to established doctrine.

Svechin's procedures, though rudimentary, were designed to promote change and correct deficiencies in Soviet warfighting skills. Though he advocated providing solutions, his technique utilized a critique process that assessed blame. This procedure, while extremely productive for short term problems, could not be sustained for long periods of time. This was especially true with the mind-set of the Soviet people who reeled from his litany of failures during a time of political and military unrest. For a brief period, Svechin was able to arouse and stimulate a professional dialogue among the Soviet junior officers.[23] Today, the pursuance of honest criticism and self-assessment should continue to be productive and non-threatening. Our methodology must remain above the military and political pressures that Svechin faced. Succumbing to them will divert the goal of the AAR in establishing a professional dialogue, resulting in placating those who wish to fix the problem by finding a responsible party. While applicable in certain circumstances, this is not the desired end-state of the AAR process.

The modern AAR process begins by seeking to find out what happened during a particular training event or mission. This is done through the factual interpolation of data by a trained OC staff looking at the battle through the eyes of the player unit.

With the OC as a guide, the unit in training attempts to determine what went right or wrong during the event. The unit than draws conclusions on how the task or event should be done the next time. The process concludes when this task or event is performed again.[24]

The key in this process is to ensure the unit learns the correct lessons through self-discovery. If this does not occur, the intent of the AAR as a professional dialogue to promote lessons learned is not met. Basing the professional dialogue on the unit's training objectives minimizes the tendency for the AAR to become a critique.[25]

However, self-discovery and a professional dialogue are not always the patent answer to comply with the doctrinal intent of the AAR. In some instances, the OC or the unit will not use the information available or have the technical and tactical expertise to derive a solution to the problem. When this occurs, the belief that the issue is, resolved only draws false conclusions and does not fix the problem. This results in an incorrect training assessment and leads to a repeat of the problem in the future.[26]

ANALYSIS OF THE AAR

The AAR was doctrinally designed as a sound fundamental process to provide lessons learned and to forge new ideas for unit training techniques. Bypassing the outmoded critique process, the AAR began to appear in the 1970's, but was not incorporated into U.S. Army doctrine until 1991.[27] Through trial and error the mechanics of the AAR process were continually studied and refined, eventually creating the Battlefield Operating Systems (BOS) as the

primary interactors on which to build the AAR. This use of the BOS met the requirements by the Department of the Army and is the cornerstone of our current AAR doctrine.[28]

However, before illustrating an example of a breakdown of the AAR process and its ramifications, it is first necessary to understand the conditions and climate for conducting an AAR. The AAR must create an environment that enhances a unit's combat readiness by linking lessons learned to the training objectives of the unit. Adequate preparation for the AAR by both the senior OC and the unit preempts the development of an adversarial relationship between the two groups.

When these conditions are met, the AAR remains a professional discussion and does not turn into a critique or a lecture. Consistency and standardized procedures will maintain the focus on the training objectives of the organization as opposed to the deficiencies of one individual. Yet, only the concerted effort of the senior OC and chain of command to act in harmony will preclude an individual from being placed "in the dock."

The Basics of the AAR

The AAR process in this section is based on my experiences during a four year period as an Observer Controller at the National Training Center. Though the capabilities and techniques may vary from installation to installation, the procedures and methodology for the AAR are approximately the same. For a formal AAR to occur it must have two components that operate in tandem: the senior level OC (usually a lieutenant colonel) giving the AAR; and a unit

13

(normally a task force or brigade) attending the AAR. An AAR is given at the end of each mission, usually for a duration of two hours. The participants represent the chain of command of the unit, as well as any other individuals deemed necessary by the OC conducting the AAR. Generally tired, hungry, frequently frustrated from the battle, and anticipating confrontation, the "players" minus their combat gear enter a special "van" and are seated in designated chairs, as determined by the OC.

The AAR van is a self-contained, climate controlled vehicle that is able to hold up to thirty-five individuals. Those individuals not "invited" into the van can view the AAR from an overflow tent directly outside the van. These soldiers, though not benefiting from the brief respite the van offers, view the AAR outside on televisions sets. This often makes for a more relaxing environment to watch the AAR since direct participation and confrontation are not required. At the NTC the AAR van usually provides the only bit of relief from the oppressive conditions of the desert.

The AAR van has the capability to receive and transmit audio and visual data submitted by the subordinates OC's. This data, consisting of video, communication sound bytes, still photographs, and computer-generated graphics, allows the OC to graphically portray the battlefield for the unit. The unit uses this information to learn from their actions on the battlefield. These technological innovations also facilitate the unit reliving the numerous training experiences from their encounters with the

Opposing Forces (OPFOR).

All the proceedings in the AAR are broadcast to and from the Targeting and Analysis Facility (TAF), more commonly referred to as the "Star Wars Building." Collected battlefield observations are submitted to the Star Wars by the OCs for building the various issues that are used in the AAR. The AAR for the unit is put together in this building for the senior OC in the field.

However,the process is not totally mechanical. There is a distinct human factor that infuses the AAR. This factor is the OC who serves as a coach, teacher, and sometimes preacher in his role as both observer and trainer of the unit. The combined OC team forms the nucleus of the NTC, providing key information to the senior OC, as well direct feedback on doctrinal solutions and TTPs to the unit. It is the human interaction between the player and the OC, combined with modern technology, that distinguishes the NTC as a premier training facility.

The OC team is organized to replicate the unit being observed. Each player unit officer and senior NCO has an OC counterpart who works with him for the duration of the rotation, and functions as the subject matter expert (SME) for his particular BOS. The OC is with his counterpart during the planning, preparation, and execution of the battle, continually briefing the senior OC on the status of the unit and their training status. After the completion of the battle, the OCs backbrief their counterparts on their observations, and meet with the senior OC to discuss the focus for the AAR.

The information provided by the OCs forms the backbone for the AAR. In a well-designed AAR the senior OC has three to four key issues that are the focus for that particular mission. The intent at the AAR is to then elicit comments from the unit on what they felt went well, and what they believe needs improvement. Combining this technique with a high level of technical and tactical expertise, the senior OC leads the unit towards self-discovery of the relevant training issues from the battle. It is imperative that the senior OC postures himself to ensure that when the unit leaves the AAR, they are comfortable knowing how to resolve any identified deficiencies.

The Breakdown of the Process

The key factor in training and teaching the unit to resolve these training deficiencies is predicated by linking all the BOS. The most effective AARs are those in which the OC and the chain of command recognize this interdependency and do not restrict their analysis to the individual BOS.

Failure to recognize this linkage occurs for two reasons. The OCs must prepare themselves to conduct AARs in accordance with doctrine. They are responsible to be technically and tactically proficient, and must know how to elicit the professional dialogue that is required to link the operating systems. Therefore, in addition to the mechanical skills required to give the AAR, there is a human dimension that supports the interaction between the various operating systems.

Prior to coming to the training center the unit must conduct home station training that focuses on how to use the information presented at the AAR. The unit should decide what they desire from the training session, as well as how they are going to incorporate the information provided. If they only concentrate on one particular operating system, they may not come to the realization that the learning deficiency arose from a failure in another operating system, or that it was a mixture of several system failures.

This has led to studies attempting to identify whether problems are actually being resolved, and if so, why are they reoccurring.[29] By focusing on the AAR, it is possible to address these repercussions when the process goes awry and fails to satisfy the demands stipulated by doctrine.

To analyze the problems of the AAR it is necessary to conduct "an AAR of the AAR process," and offer a solution to either the process or the doctrine. Often, what should be done is not accomplished either due to the inexperience of the OC, or the unpreparedness of the unit. Therefore, there must be some method of checks and balances in the system to hold both parties accountable. By exploring the AAR one can "peel back the onion" to determine what happens when the learning curve goes beyond fixing the problem.

To understand the complexities and ramifications of what happens when the AAR does not meet the specified intent established by doctrine, this paper analyzes an actual, historical AAR that did

not meet doctrinal guidelines or provide the unit valid feedback for their training. Analysis of this AAR portrays the impact of an AAR becoming a critique, and how an individual is forced to become the "man in the dock."

The AAR Gone Awry

FM 25-101 states, "the most difficult task for an AAR leader is to avoid turning the discussion into a critique or a lecture."[30] One of the first techniques required of any OC is to state the objectives of the AAR and reinforce with the participants that it is "their" AAR. The OC must remain aware that issues discussed and resolved are for the benefit of the unit.[31] This enables the unit to tie the information provided by the OC to their assessment of the deficiency.

The following illustration is based on an actual AAR conducted by a senior OC at the NTC after a Deliberate Attack offensive mission. Analysis of this AAR permits the opportunity to view the breakdown of the AAR process and the ramifications on the unit and their training. Though this example is not indicative of all AARs, it is representative of a mechanistic AAR process that advocates quantity over quality, and process over substance.[32]

The OC took no measures to establish a professional dialogue. Throughout the AAR, the senior OC used the data provided by his OCs in an adverse manner, vice using it to substantiate the learning points necessary for the unit. Since this credibility was not established early in the process, it quickly became evident that the AAR would not promote learning as specified by doctrine.[33]

18

Perhaps this was because the OC spoke for forty-five minutes before the first player had the same opportunity. By controlling the AAR and minimizing the establishment of a professional rapport, the OC failed to elicit any response from the participants. Throughout the first hour of the AAR, the OC did not raise any significant issues or key events. He only addressed individual unit corrections. This problem is representative of a recurrent problem in which training deficiencies are not resolved during the AAR.[34]

An interesting trend developed at this point in the AAR. Leaders were murmuring that the vehicles or soldiers in the picture were not theirs, as they tried to identify the bumper numbers of particular vehicles. By now the OC had lost his control over the player unit. As a result, the AAR only identified problems and established which individuals were responsible. This was evident by observing the commander, who spent the majority of the AAR looking for the culpable party. Having been placed "in the dock" by the senior OC, the commander lost sight of the AAR and quickly looked for a subordinate to take his place. This was even more apparent because the commander's senior rater was there.

Having lost the conditions to promote learning, it was apparent that issues raised in the AAR did not tie together learning points, or were so minor that they served no purpose for the participants. This was exemplified in a 10 minute discussion on how many stinger missiles the unit should carry. Had this been a key issue contributing to a lesson learned it may have been important. Yet it was only brought out because it was "another"

unit deficiency. Another example occurred when the disposition of the enemy was discussed one hour and forty-three minutes into the AAR. Normally, this is done in the beginning of the AAR to provide the unit a view of how the enemy perceived the battle. As a result, the players did not have a frame of reference based on the OPFOR's action for their discussion. This hindered their ability to generate discussion on key issues.

The doctrinal use of the plan, prepare, and execute format to conduct an AAR was not adhered to. This could have been overlooked had the OC established some innovative technique for conducting the AAR. Yet the AAR only focused on snapshots in time, rather than a detailed picture of the training event. Instead of contributing to the unit's training, the OC was only identifying symptoms of a potentially far larger problem that could encompass numerous operating systems.

An AAR of this type evokes two possible responses. The unit could unite against the OC, ignoring his role as teacher, coach, and trainer. This negates the value of the OC to help develop the warfighting skills of the unit. Another response is that the player's morale suffers and they lose the will to fight, whereby they have a bad rotation, posing an additional challenge to the commander.

An AAR of this type is detrimental to the individual soldier because his performance has not improved and the unit loses confidence and respect for him. Deviation from the doctrinal role of the AAR which does not contribute to learning based on proper

techniques and procedures results in individuals often finding themselves at the tip of the spear when the blame is being doled out.[35]

The Man in the Dock

The significance of this problem is an unwarranted casualty of an AAR process that loses the capability to foster unit learning. However, the AAR is not the only problem in focusing blame instead of fixing the problem. The unit in training has a responsibility as well. If they are unprepared to actively participate in the AAR, and are not willing to enter into the professional dialogue that will assist them in resolving problems, they will eventually look to fix the blame for deficiencies on individuals.

Right or wrong, this perception of "the man in the dock" exists among individuals who come to train at the NTC. It is detrimental not only to training, but also to the credibility of the AAR process. If individuals feel they are singled out by the AAR process as well as their chain of command for unit failures, the tenets which bind the AAR will slowly erode over time. This importance is magnified by Eliot Cohen and John Gooch in their book, Military Misfortune. Their insightful analysis focuses on the problem of fixing the blame on an individual rather than accessing the causes of a problem within the organization.

The man in the dock stems from the tendency of the commander to take responsibility for everything that happens in his unit. However, the size and scope of modern warfare has "developed an organizational dimension that can . . . contribute to triumph or

tragedy."[36] As a result, the groundwork is laid to search for culpable individuals which often masquerades for the inability of the unit to come to grips with the true cause of the problem.

The increased complexity of modern warfare makes it extremely difficult to single out any one particular individual for the aggregate problems of the unit. Yet in today's Army, we are just as inclined to blame military misfortunes on individuals as we are to hold the weatherman accountable for an unseen storm.[37] It is this urge that both the AAR process and the chain of command must curb. This allows an individual to accept responsibility for a deficiency, benefitting the organization instead of having total responsibility for the organization thrust on him. Both the player unit and the OC have a responsibility to establish an appropriate atmosphere to prevent this situation from occurring. This enables the necessary level of training to take place.

The OC and the unit must adhere to certain requirements that dictate the requisite preparation for the AAR. If the preparation is sufficient, it can offset the frequent negative connotations and perceptions they have of each other. When this preparation is not done and the AAR turns into a critique, as this example indicates, evaluation of individual performance circumvent the overall appraisal of the units performance.

The Critique Versus the AAR

The AAR focuses on how "we" can do something better, versus the critique's focus on what "you" did wrong.[38] The AAR is a process that requires active participation over a critique's

passive observation.[39] This coincides with establishing multiple points of view in the AAR, as opposed to one point of view in the critique (presented by the person conducting it.)

The AAR, by utilizing all the participants, contributes to multiple sources of information. This leads the AAR to present solutions to problems instead of identifying situations without solutions.[40] This is in contrast to a critique which does not address techniques to avoid failure in the future. Instead, only occurring deficiencies impact on the discussion.

The intent of the AAR is to avoid negativism which is by-product of the critique.[41] Yet this is not always the case. In the example mentioned previously, the OC turned the AAR into a critique with the possible effects of demoralizing the unit. To preclude this the OC must insure that the unit lessons learned are a positive experience and lead to a better trained and proficient unit.

A key issue to consider is that the AAR, whether conducted positively or not, belongs to the unit. It should facilitate training and improve their warfighting skills. The role of the OC is only to lead the unit towards self-discovery and assist them in developing solutions to training deficiencies by critical feedback, teaching them only as required. Though teaching is not mentioned in doctrine, this must be explored as a method to insure the unit's training needs are met. A concise examination of both the OC and the unit role in this process will diminish the possibility of inadvertently turning an AAR into a critique.

Responsibilities of the OC and the Unit

Preparation by the OC incorporates how to best utilize the information obtained for the benefit of unit training. The OC should begin his assessment of the unit prior to the beginning of the battle, leading him to establish an identity with the unit. This will avoid unrealistic expectations of the unit by the OC which can lead to unnecessary bloodletting in the AAR.

Failure of the OC to "see the battlefield" can inhibit his ability to properly analyze information; this leads to an AAR that is too mechanistic, sacrificing quantity for quality, and substance for process.[42] Correct utilization of information by the OC as he prepares the AAR enables him to focus it across the broad spectrum of lessons learned. This will lead to a positive post-training atmosphere for the unit.

In certain units a perception exists that the OC is only concerned with placing the blame on individuals.[43] The Observer Controller can avoid this by ensuring he does not speculate or pontificate during the AAR. If the OC concentrates on educating the unit, his methodology will elicit information the unit can use to solve problems. This prevents the unit from viewing the AAR as a cross examination. The OC must remember that finding the truth is important, but correcting training deficiencies is his primary reason for existence.

There are numerous techniques the OC can use to contribute to a positive and productive AAR. These techniques avoid a sequential walk-through of the battle which cause an OC to address historical

24

events, as opposed to analyzing performance. Building a positive relationship with the unit encourages a commitment from the unit to resolve problems that require additional training.

Providing feedback as a coach and teacher encourages an atmosphere that does not suppress unit participation, encourages learning, and conforms to doctrine.[44] The use of feedback drives the AAR process and it is also a mechanism that is prevalent in the area of human resources in the business.[45] The OC must always remember that in providing feedback, the unit should leave the AAR more knowledgeable than before it started.

The unit's responsibility in the preparation process begins at home station. They must come to the NTC with a clear understanding of how to use the information provided. Without this preparation, it is often difficult for the unit's soldiers to enter into a professional discussion with the OC. They will consistently look to fix the blame on an individual within their organization since the general consensus is to not be receptive to the OC's.

This attitude often results when the unit spends an inordinate amount of time replicating the mechanics of the NTC (i.e., firemarkers) and not enough time with what they can control. The key element is the commander, who should use the AAR to enhance his concept of battlecommand. This prepares both himself and his unit to use the AAR as an assessment tool to validate the training level of the unit based on their Mission Essential Task List (METL). Commanders who successfully accomplish this will find that the AAR helps them "see the battlefield", affording them the opportunity to

know the enemy, the terrain, and themselves.

Perception plays an important role in contributing to an AAR focusing on fixing the blame. This problem, which sometimes exists in the dynamics of the OC and the unit, is a two-way vector that both sides have a responsibility to resolve.

The unit can diffuse the negative perception of the OC by the attitude they convey during the rotation. For example, units that blame problems on deficient equipment they were issued or claim that the OPFOR cheated are prone to fix blame within their own unit during the AAR. These reductionist tendencies prevent the unit from taking lessons learned and using them as the foundation for greater victory.[46] The chain of command must not forget that they, not the OC, decide what constitutes success at the NTC.

Finding a Solution

If the focus of the AAR continues to place individuals "in the dock" for problems that are part of the organizational structure, it could have a severe impact on training in the unit. Individuals who feel persecuted by the AAR may focus on deflecting the blame away from themselves. This will not only hurt their professional development, but will also diminish their warfighting skills.[47]

If this dynamic is established in the unit it will cause soldiers to believe that their primary concern should be self-preservation. The ramifications of this on the command climate is immense since individuals no longer concern themselves with training the needs of the unit to standard. Eventually this can only lead to a loss of integrity in the unit and a decline of

26

combat skills.[48]

Problems that occur in our AAR process should not be ascribed to either the OC or the unit. At times both bear the responsibility of misusing information to fix the blame instead of using it to fix the problem. This study has addressed what these problems are and why they occur. Knowing what is wrong with the system affords an opportunity for a solution to correct it.

The problems mentioned here have in some cases hindered the ability of both the OC and the unit to accurately derive solutions from lessons learned during training. By focusing on one individual the feedback cycle for the flow of information is limited. Implementing the cybernetic domain as a framework for the AAR will correct these problems that emanate from how information is handled by the OC and the unit.[49]

THE AAR AND THE CYBERNETIC DOMAIN

The tendency during an improperly conducted AAR is to base a deficiency on a singular issue which places an individual "in the dock." Too often during the AAR, both the OC and the unit limit a training issue to a particular operating system, disregarding key elements of information. Yet as Clausewitz states "effects in war seldom result from a single cause."[50] AARs that focus on an issue tied to one source are the primary cause for an individual ending up as the "man in the dock." The issue for the Army and the training centers becomes how to alleviate this problem, which is more prevalent than most people realize.

27

During my tenure at the NTC, numerous individuals expressed their displeasure that the AAR was not resolving problems but rather creating new ones for them. Their concern was that trends in the AAR were continually focusing on why an event happened, which prompted the question from their superiors; who was responsible?

While there is no doubt that the training at the NTC has been effective, trends indicate that training deficiencies are repeated.[51] The doctrine in FM 25-100 and FM 25-101 focuses on lessons learned, but does not succinctly address the methodology to inculcate the learning. Therefore, the process does not always achieve the desired end-state, making units more proficient in their warfighting skills. Soldiers who clearly comprehend their level of performance is important, but understanding and taking the appropriate measures to preclude a repeat of training deficiencies is the key.[52] The AAR must drive the unit to fix the problem and this must be emphasized in our doctrine.

The tendency to link an individual to a problem experienced during training is attributed to both the OC and the player unit. They allow this to happen since they do not identify and explore the connection between the training problem and the other factors that led to it. Yet if issues are developed in the AAR it is easy to identify and resolve problems within the organization that stem from multiple operating systems.

The framework of the cybernetic domain affords the OC and the unit a holistic approach to develop solutions to problems across

28

the broad spectrum of the organization. The cybernetic domain concentrates on linking systems together, focusing on the whole instead of the part. Linking systems together not only expands how to solve problems, but also preempts their reoccurrence within the organization. As a result, the impact and cause of the training deficiency is understood by the whole organization.

To assess the impact of the cybernetic domain on the AAR process, it is first necessary to explain its parameters. Cybernetics is the science of communication theory that is concerned with the comparative study of automatic control systems.[53] It is this science that incorporates a shared data network to manage information across the spectrum of command and control.[54] The system was developed because the structure of command and control in the military has changed. Increased demands for information and technological developments have now made more information available to the commander.

The cybernetic domain concerns four processes: organization; command; control and communication and information. The human element on the battlefield surround these components and process information for assessments and decisions based on their intellect and personality. (See Figure 1)

CYBERNETIC DOMAIN

ELEMENTS

| ORGANIZE | CONTROL | COMMAND | COMMO & INFO |

HUMAN ELEMENT

(FIGURE 1)

29
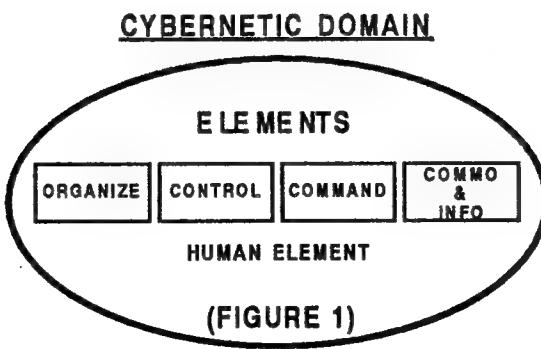
The first component, organization, provides the framework to manage information in order to achieve unity of effort. Command, establishes the goal of linking the ideal with reality, while control, minimizes deviation from the objective. Communication and information enables data to get to its final destination, and includes the flow of intelligence, unit data, administrative information, media, and a soldier's inter-personal communication needs.[55]

Focusing on common threads within the military organization, cybernetics provide a mechanism to help overcome the uncertainty of war while seeking a solution for problems that occur. Advancements in doctrine and technology have sought to minimize the effects of disorder on the battlefield as they pertain to command, control, communication, and intelligence. The desired product of the components of the cybernetic domain is knowledge based on the raw material of information that flows within an organization.[56] This makes cybernetics an ideal vehicle around which to structure the AAR.

Using the Brigade Fire Support Officer (FSO) as a vehicle, it is possible to show how problems normally attributed to one individual are in actuality part of a larger problem within the organization. As a result, the cybernetic domain can be used in the AAR process to eliminate the tendency to fix blame on an individual and put the major effort on fixing the problem. An example AAR is presented using a cybernetic technique which makes fixing the problem preeminent to fixing the blame.

For this AAR, a mechanized infantry brigade was given a mission to conduct a deliberate attack. During this operation they were required to conduct a deliberate breach in order to get to their objective. Due to numerous factors, the unit was unable to successfully execute the breach and, as a result, was prevented from obtaining their objective. In this case, responsibility for the brigade's inability to breach the obstacle and continue their mission was placed on the FSO by the senior OC conducting the AAR. However, a myriad of other problems contributing to the brigade's failure occurred during this operation.

The senior OC and the unit chain of command ignored the numerous factors across the spectrum of the BOS in order to focus the blame on the FSO. While the FSO did not integrate fires properly (i.e., the use of smoke and the massing of fires at the point of penetration) he alone was not responsible for the failure of the brigade. Rather this was a combined arms operation which required coordination and synchronization among the entire brigade staff, to include the commander. Yet this AAR did not address combined arms operations, opting instead to base the unit deficiencies entirely on the FSO.

Designating the FSO as the sole culprit alleviated the responsibility of the OC to fully determine the cause of the problem and establish the necessary linkage between the operating systems. Additionally, the unit was able to take comfort knowing that the FSO assumed responsibility for the operation, which allowed the chain of command to deflect any responsibility from

their actions.

Minimal preparation by the OC and the indictment of the FSO masked other deficiencies within the staff. While this was comforting to the OC and the unit, it failed to support the tenets of our doctrine. AARs conducted in this atmosphere lack the clarity needed to address the resolution of training deficiencies. They leave the door open for an improper assessment of the issue by the OC, and facilitate improper lessons learned by the unit. This results in the OC and the unit believing they have resolved the problem.

Using the current AAR technique perpetuates the problem instead of resolving it. This is evident in the data from the Center for Army Lessons Learned (CALL) which indicates that over fifty percent of deliberate breach operations fail. (This often occurs in the same unit on different rotations). Incorporating the AAR within the cybernetic domain allows us to share common doctrine, goals, and views which can lead to common solutions. However, the results attained are dependent on the preparation by the OC and the open-mindedness of the unit. If this occurs, the cybernetic domain can act as an honest broker to prevent the OC and the unit from looking for the guilty party.

Examining the same issue within the realm of the cybernetic domain offers us a different view of the same situation. To do this it is necessary to break down the elements of the brigade into like components of the cybernetic domain. This begins with the organization, incorporating the brigade staff, the table of

organization and equipment (TO&E), the targeting cell, and actions coordinated outside the brigade. The element of command which includes the Brigade Commander, the Fire Support Coordinator (FSCOORD), and their coordination with higher headquarters for resources. The element of control, which in this case is the Brigade FSO. Communication and information are the final element which includes the collection and acquisition assets of the unit, the reconnaissance and surveillance (R&S) plan, communications net architecture, and mission processing. These four components are surrounded by the human element which is manifested in the unit rehearsals, clearing fires, the cohesion of the unit, and the personality of the leaders involved.

Conducting the AAR using these five conditions will lead the OC and the unit to a different conclusion for the actual cause of the unit's failure. In examining these areas, other issues emerge which are linked to the improper use of smoke and fires at the breach, originally cited as the primary cause of the problem. By putting the FSO "in the dock" for his actions, the OC only looked at one element of the cybernetic domain and the unit now believes it has resolved the issue. However, integrating the other three areas into the AAR indicates a far more severe training problem for the unit.

In addition to the FSO's failure, there were other elements which adversely impacted on the unit's ability to accomplish the mission. The OC had access to this information but failed to use it to see the overall effects on synchronization and mission

accomplishment. An examination of these and other issues within the cybernetic framework provides clarification on the training deficiencies within the brigade.

Organization

The brigade staff was not organized internally or externally to conduct a synchronized operation. The initial course of action (COA) developed by the brigade staff was not based on the disposition of enemy forces. By not including the enemy in COA development, the unit began to develop a self-fulfilling prophecy that the plan would succeed. This was exemplified by the brigade engineer who had little or no input into the initial plan. As the situation developed the operations officer (S-3) did not use the information submitted by the engineer, intelligence officer (S2), or FSO to develop his scheme of maneuver. Consequently, the plan was not synchronized hindering successful accomplishment of the mission.

Obstacle intelligence was not requested outside of the brigade. The plan was based on a single obstacle belt, when in fact there were multiple belts. This, coupled with an inefficient R&S plan, turned a deliberate attack into a movement to contact. The required information on where the breach site was and the initial point of penetration was never conveyed to the FSO, hindering his ability to focus combat power. Throughout the operation, failure to adhere to the doctrine of suppress, obscure, secure, and reduce for the conduct of a breach severely impacted on the brigade's ability to attain its objective.[57]

Though there were problems with the indirect fires, the unit did not get the support by fire force in position, nor reduce the obstacle with the breach force. The problem was exacerbated by a lack of control at the breach which hindered the ability of the artillery to get forward. At this point, the brigade was not in position to continue its mission. Continuing problems in the brigade and the lack of synchronization increased the unit's potential for failure well beyond the control of the FSO.

Command

This operation was done without a strong commander's intent by the brigade commander. The purpose of the commander's intent is to describe the desired end state and purpose of the mission in order to focus subordinate elements.[58] In lieu of this guidance the staff, and in particular the FSO, were left to their own devices. This resulted in an inability to prioritize the brigade's assets to support the scheme of maneuver. An example of this was the lack of awareness by the commander on the number of tank plows and rollers within the brigade, adding to the fact that the brigade had not weighted the main effort.

Additionally, the commander and the Fire Support Coordinator (FSCOORD) were not in position to see the battle. This minimized their ability to control the battle and decide where to focus the brigade's combat power at the decisive point in the battle. This resulted in competing calls for artillery smoke and fires at the point of penetration, neither of which were prioritized.

Communication and Information

A main failure of this entire operation was the inability to develop sufficient intelligence to identify the obstacle and accurately target the enemy. There were numerous reasons for this. The plan lacked an obstacle template by the engineer and the S-2, and priority intelligence requirements (PIR) were not established to focus the collection plan. Additionally, named areas of interest (NAI) were not designed to confirm or deny the enemy situational template. Without a clear focus on the enemy, the targeting done by the FSO was not a synchronized and coordinated process.

Lacking a firm understanding of enemy doctrine, the unit underestimated the enemy's ability to construct obstacles. Lack of engineer reconnaissance with the scouts hindered their ability to determine a point of penetration for the unit which limited the FSO's ability to focus his fires.

Under these new conditions, isolating the brigade's failure only on the inefficient use of smoke and the lack of massed fires at the point of penetration is suspect. The discovery of other deficiencies in the brigade cybernetic structure vindicates the FSO from complete responsibility for the brigades actions. These deficiencies, seen in the context of the cybernetic domain, are interrelated in the brigade's inability to breach the obstacle.

The cybernetic domain is only a tool to focus the OC and the unit on the whole, rather than partial issues. As a methodology for conducting AARs, it provides the best method of feedback to the

unit and creates a forum that discusses how to fix the problem by establishing an interactive flow of information.

The OC and the unit leaders share a responsibility to manage the climate within the cybernetic domain to stretch the creative envelope of all the participants.[59] Yet, all of this is predicated by reliable, timely, and accurate data and the knowledge of how to use it to train units. If OC's and units can adhere to this standard, it is possible to alleviate problems before they become military misfortunes.[60]

CONCLUSION AND RECOMMENDATIONS

Doctrine in the U.S. Army is explicit on the conduct of the AAR. FM 25-100 and FM 25-101 outline the AAR parameters specifying the use of a training diagnostic process for both formal and informal AARs' to increase and reinforce learning.[61] The ability to conduct an AAR under these conditions is viewed with awe by other militaries, who take issue with our focus on self-assessment and criticism of training deficiencies as a means to improve our warfighting capabilities.[62] However, reoccurring deficiencies among the units conducting training at places such as the NTC pose the question that asks whether our training process is actually increasing and reinforcing learning.

While our AAR doctrine is sound on the desired end-state, it lacks specificity on how to insure that the implemented training methodology improves performance. This has led to OC's and units becoming enamored with process vice the substance of the AAR, causing a loss of focus on the original intent.

The preoccupation by the OC and the unit chain of command with "peeling the onion" has resulted in an AAR that focuses more on "why" a problem occurred, rather than on how to resolve it.[63] Consequently, the lessons learned and their solutions have not adapted to changes in the organizational structure, technology, and the personal skills and leadership traits of the players involved. Therefore, whether real or perceived, sufficient anxiety exists within professional soldiers in our Army that the AAR process no longer focuses on learning, but looks to fix the blame for training deficiencies on individuals.[64]

This study has identified two major problems that have significantly contributed to a breakdown in the AAR process. Initially, the OC conducting the AAR often does not present the information gathered in a sufficient manner to warrant a solution to the unit's training deficiencies. This is followed by the chain of command of the unit attending the AAR often misinterpreting the information they receive; then failing to apply the lessons learned across the spectrum of the organization. When these problems arise, as the examples in this study indicated, the doctrinal intent of the AAR to facilitate learning is no longer met. As a result, negative perception of the AAR can quickly become reality.

To continue to emphasize learning and keep individual soldiers "out of the dock", the Army must step outside the existing doctrinal techniques of the AAR. This study recommends the use of the cybernetic technique to provide a mechanism for managing information that enhances the goals of the training diagnostic

38

process.

The use of the cybernetic domain as a methodology for the AAR incorporates a holistic approach that emphasizes linkage of the BOS during a units training period. This minimizes the potential during the AAR to become parochial on a training issue or identify an individual as the sole cause of an organizational problem. By preventing this, the cybernetic technique provides accurate lessons learned, leading to an identification of the training deficiency and its subsequent resolution.

Yet, the cybernetic domain is only a methodology to insure that the end-state of the AAR is met. To attain this capability, both the OC and the unit chain of command must establish the proper conditions for the conduct of the AAR within the cybernetic domain.

The holistic approach of the cybernetic technique reinforces the concept that the emphasis of the AAR remains on learning. Other processes that advocate a reductionist approach leave the door open for associating portions of a larger problem with an individual. When this occurs, our ability as professionals to draw on the experience, knowledge, and initiative of others to optimize warfighting skills for the future is lost.[65] This will take a strong commitment by the leaders in our Army to continue to reinforce the idealogy that success at the training centers does not equate to battle damage assessment (BDA).

The focus in our Army must remain on winning as individuals and as units. The AAR structure as it presently exists looks to place blame on individuals, rather than on the real causes

39

associated with the synchronization of the seven BOS'. By taking a cybernetic approach to the AAR process, the U.S. Army will solve many unit problems, avoiding a return to the "zero defect" army of the past. The effective management of this during peacetime training will continue to prepare the American Army to win the first battle of the next war.

ENDNOTES

1. Samuel B. Griffith, trans. <u>Sun Tzu: The Art of War</u>, (Oxford: Oxford University Press), p. 42.

2. U.S. Army, <u>FM 25-101, Battle focused Training</u> (Washington, DC: Department of the Army, 1990), p. G-1.

3. Ibid. , p. G-1.

4. BG William Coffey, Commanding General NTC, Taken from a briefing given to students from the School of Advanced Military Studies at the NTC on 11 September, 1993.

5. COL Patrick O' Neil, Commander Operations Group, Taken from a briefing given to students from the School of Advanced Military Studies at the NTC on 11 September, 1993.

6. LTC Collins, Director Center for Army Lessons Learned, Mr. Mc Closkey, Army Research Institute, Telephonic interview, 13 December 1993. Additionally, CALL publications <u>Rehearsals</u>, <u>Winning in the Desert II</u>, <u>CTC Performance Trends September 1992</u>, and <u>NTC Lessons Learned May 1986</u>, show overlap in lessons learned specifically in the area of fire support.

7. BG Fisher, Commanding General, Joint Readiness Training Center (JRTC), Comments taken from a videotape briefing entitled <u>After Action Review Philosophies</u>.

8. Eliot A. Cohen and John Gooch, <u>Military Misfortunes: The Anatomy of Failure in War</u>, (New York: The Free Press. 1990), p. 5.

9. Ibid. , p. 6.

10. Gary A. Vincent, "A New Approach to Command and Control, The Cybernetic Domain," <u>Airpower Journal 1993</u>, (Washington, DC: Airpower Journal 1993), p. 30.

11. U.S. Army, <u>FM 25-100, Training the Force</u>, (Washington, DC: Department of the Army, 1988), p. 5-2.

12. Carl von Clausewitz, <u>On War</u>, Edited and translated by Michael Howard and Peter Paret. (Princeton: Princeton University Press, 1989), p. 156.

13. Ibid. , p. 156.

14. Ibid. , p. 156.

15. Ibid. , p. 655.

16. Ibid. , p. 157.

17. Ibid. , p. 157.

18. Ibid. , p. 654.

19. Ibid. , p. 161.

20. Aleksandr Svechin, <u>Strategy</u>, (Minneapolis, Minnesota: East View Publications, 1992), p. 77.

21. Gordon A. Craig, "Delbruk: The Military Historian," <u>Makers of Modern Strategy</u>, (Princeton, NJ: Princeton University Press, 1986), p. 326.

22. Aleksandr Svechin, <u>Strategy</u>, (Minneapolis, Minnesota: East View Publications, 1992), p. 77.

23. Bruce W. Menning, <u>Bayonets before Bullets</u>, (Bloomington, IN: Indiana University Press, 1992), p. 203.

24. U.S. Army, <u>FM 25-100, Training the Force</u>, (Washington DC: Department of the Army), 1988, p. 5-2.

25. U.S. Army, <u>FM 25-101, Battle Focused Training</u>, (Washington, DC: Department of the Army, 1990), p. G-5.

26. Mc Closkey, interview, 13 December 1993. ARI has commissioned the Government and Accounting Office (GAO) to conduct a study on the repetition of lessons learned. The study has been completed, but the information is not ready for release.

27. Thomas D. Scott, <u>Tactical Engagement Simulation After Action Review Guidebook</u>, (Washington, DC: Army Research Institute), 1983, p. 2.

28. U.S. Army, <u>FM 25-101, Battle Focused Training</u>, (Washington, DC: Department of the Army), 1990, p. 2-18.

29. Mc Closkey, interview, 13 December 1993. Other sources include: A study by LTC Larry Word, <u>Observations From Three Years at the NTC</u>, and observations from CALL on lessons learned from 1986 to 1990 that depict repetitive issues that coincide with the quarterly trends from the NTC.

30. U.S. Army, <u>FM 25-101, Battle Focused Training</u>, (Washington, DC: Department of the Army, 1989), p. G-5.

31. Ibid. , p. G-5.

32. Larry E. Word, <u>Observations From Three Years at the NTC</u>. (Alexandria, VA: ARI for Behavioral and Social Sciences), 1987, p. 9.

33. U.S. Army, <u>FM 25-100, Training the Force</u>, (washington, DC: Department of the Army), 1988, p. 5-2.

34. Ira T. Kaplan and Jon J. Fallesen, <u>AAR Guide for Army Training Battle Simulation System</u>, (Alexandria, VA: ARI for Behavioral and Social Sciences), 1986, p. 15.

35. COL James Mc Donough, Director School of Advanced Military Studies and LTC (P) Stephen M. Lutz, instructor ·SAMS, 13 December 1993. These interviews focused on their experiences as battalion commanders at the NTC.

36. Eliot A. Cohen and John A. Gooch, <u>Military Misfortune: The Anatomy of Failure in War</u>, (New York: The Free Press, 1990), p. 7.

37. Ibid. , p. 8.

38. Thomas D. Scott, <u>AAR Guidebook I: NTC</u>, (Alexandria, Va: Army Research Institute 1988), p. 17.

39. Thomas D. Scott, <u>How to Evaluate Unit Performance</u>, (Alexandria, VA: ARI for Behavioral and Social Sciences), 1984, p. 42.

40. Ibid. , p. 42.

41. Ibid. , p. 44.

42. The words "synthesis and integration" were used by the Commander Operations Group in describing the role of the OC's at the National Training center during a briefing on 11 September, 1993.

43. Mc Donough, interview, 13 December 1993. As an OC at the NTC for 47 rotations I often was privy to this insight by various individuals undergoing training. In my research for this monograph this view was substantiated by interviews with officers who went through rotations at the NTC.

44. U.S. Army, <u>FM 25-100, Training the Force</u>, (Washington, DC: Department of the Army), 1988, p. 5-1.

45. John Naisbitt and Patricia Aburdene, <u>Re-Inventing the Corporation</u>, (New York: Warner Books), 1985, p. 117.

46. Coffey, briefing, 11 September 1993.

47. COL Larry D. Aaron, Former senior live-fire trainer NTC, This observation is based on discussions with COL Aaron while working for him from September 1988 to July 1990. COL Aaron related his opinion of a unit undergoing training whose commander entered into a personal confrontation with him.

48. William G. Butler, <u>How Should Brigade and Division Commanders Assess Success or Failure on the Airland Battlefield</u>? (Ft. Leavenworth, KS: U.S. Army CGSC), 1986, p. 9.

49. Gary A. Vincent, "A New Approach to Command and Control, The cybernetic Domain," <u>Airpower Journal Summer 1993</u>, (Washington, DC: 1993), p. 29.

50. Carl von Clausewitz, <u>On War,</u> Edited and translated by Michael Howard and Peter Paret. (Princeton: Princeton University Press, 1989), p. 157.

51. Collins, interview, 13 December 1993.

52. U.S. Army, <u>FM 25-101 Battle Focused Training</u>, (Washington, DC: Department of the Army, 1988), p. G-6.

53. Webster Ninth New Collegiate Dictionary, 1984, p. 351.

54. Gary A. Vincent, "A New Approach to Command and Control, The Cybernetic Domain," <u>Airpower Journal 1993</u>, (Washington, DC: Airpower Journal 1993), p. 25.

55. William J. Wansley, <u>American Spirit: A Leadership Philosophy for U.S. Tactical Forces</u>, (Fort Leavenworth: SAMS Monograph, U.S. Army CGSC, 1990), p. 24.

56. William J. Wansley, <u>American Spirit: A Leadership Philosophy for U.S. Tactical Forces</u>, (Ft. Leavenworth, KS: U.S. Army CGSC), 1991, p. 24.

57. U.S. Army, <u>FM 71-123 Tactics, Techniques, and Procedures for Heavy Forces</u>, (Washington, DC: Department of the Army, 1992), p. 3-32.

58. U.S. Army, <u>FM 100-5, Operations</u>, (Washington, DC: Department of the Army, 1993), p. 6-6.

59. William J. Wansley, <u>American Spirit: A Leadership Philosophy for U.S. Tactical Forces</u>, (Ft. Leavenworth: U.S. Army CGSC, 1990), p. 28.

60. Eliot A. Cohen and John A. Gooch, <u>Military Misfortune: The Anatomy of Failure in War</u>, (Cambridge, Mass: Harvard University Press, 1990), p. 8.

61. U.S. Army, <u>FM 25-101, Training the Force</u>, (Washington, DC: Department of the Army, 1990), p. glossary-1.

62. Based on the author's observations during his assignment at the NTC, while conducting and participating in discussions with various foreign militaries.

63. Collins, interview, Mc Closkey, interview, 13 December 1993.

64. O' Neil, briefing, 11 September 1993.

65. Larry E. Word, <u>Observations From Three Years at the National Training Center</u>, (Alexandria, Va: Army Research Institute, 1986), p. 14.

BIBLIOGRAPHY

Government Publications

US Army. FM 6-20, Fire Support in Combined Arms Operations with Change 1. Washington D.C: Department of the Army, 1977.

US Army. FM 6-20-1, The Field Artillery Cannon Battalion. Washington D.C: Department of the Army, 1990.

US Army. FM 6-20-10, The Targeting Process. Washington D.C: Department of the Army, 1990.

US Army. FM 6-20-30, Fire Support for Corps and Division Operations. Washington D.C: Department of the Army, 1989.

US Army. FM 6-20-40, Fire Support for Brigade Operations (Heavy). Washington D.C: Department of the Army, 1990.

US Army. FM 6-20-50, Fire Support for Brigade Operations (Light). Washington D.C: Department of the Army, 1988.

US Army. FM 25-100, Training the Force. Washington D.C: Department of the Army, 1988.

US Army. FM 25-101, Battle Focused Training. Washington D.C: Department of the Army, 1990.

US Army. FM 71-3, Armored and Mechanized Infantry Brigade. Washington D.C: Department of the Army, 1988.

US Army. FM 71-100, Division Operations. Washington D.C: Department of the Army, 1990.

US Army. FM 100-5, Operations. Washington D.C: Department of the Army, 1993.

US Army. FM 100-8, Combined Army Operations (Draft). Washington D.C: Department of the Army, 1992

US Army. FM 101-5-1, Operational Terms and Symbols. Washington D.C: Department of the Army, 1985.

US Army. "Fort Sill Desert Storm Lessons Learned" Fort Leavenworth: KS, Center for Desert Storm Lessons Learned.

US Army. MG Tait's After Action Report, Master Book II. Fort Leavenworth: KS, Center for Desert Storm Lessons Learned.

US Army. "VII Corps Desert Storm After Action Report" Fort Leavenworth: KS, Center for Desert Storm Lessons Learned.

Books

Baynes, John, <u>A Study of Men and Courage</u>.   Garden City Park, N.Y: Avery Publishing Co. 1988.

Clausewitz, Carl von, <u>On War</u>. Edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1989.

Cohen, Elliot A. and John Gooch, <u>Military Misfortunes: The Anatomy of Failure in War</u>. New York: The Free Press, 1990.

Crevald, Martin, Van <u>Command in War</u>. Cambridge, Mass: Harvard University Press, 1985.

Drucker, Peter F, <u>Innovation and Entrepreneurship: Practice and Principles</u>. New York: Harper and Row, 1985.

Drucker, Peter F, <u>The New Realities</u>. New York: Harper and Row, 1989.

Freitag, Loringhoven, Baron, Von <u>The Power of Personality in War</u>. Harrisburg, Pa: Military Service Publishing Co. 1955.

Griffith, Samuel B, <u>Sun Tzu: The Art of War</u>. London: Oxford University Press, 1963.

Jomini, Antoine, <u>The Art of War in Roots of Strategy</u>. ed. J.D. Hittle, Harrisburg, Pa: Stackpole Books, 1987.

Henderson, Wm. Darryl, <u>Cohesion: The Human Element in Combat</u>. Washington, D.C: National Defense University Press, 1985.

Menning, Bruce W, <u>Bayonets before Bulets</u>.   Bloomington, IN: Indiana University Press, 1992.

Naisbitt, John and Patricia Aburdene. <u>Re-Inventing the Corporation</u>. New York: Warner Books, 1985.

Paret, Peter, <u>Makers of Modern Strategy</u>.   Princeton, NJ: Princeton University Press, 1986.

Peters, Tom and Nancy Austin, <u>A Passion for Excellence</u>.   New York: Warner Books, Inc. 1986.

Peters, Tom, <u>Thriving On Chaos</u>. New York: Harper and Row, 1990.

Sackesian, Sam, C. <u>Combat Effectiveness: Cohesion, Stress, and the Volunteer Military</u>. Beverley Hills, CA: Sage Publishing, 1980.

Svechin, Aleksandr, <u>Strategy</u>. Minneapolis, MN: East View Publications, 1992.

Simpkin, Richard, <u>Race to the Swift: Thoughts on 21st Century Warfare</u>. Great Britain: A. Wheaton and Co. Ltd. 1985.

<u>Publications</u>

Down, C.W. and K.M. Johnson, <u>Analysis of Feedback in AAR's</u>. Kansas University Communication Research Center, 1987.

Julien, T.D. and G.L. Siebold, <u>Unit Leadership at the JRTC</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1990.

Kaplan, I.T. and J.J. Fallesen, <u>AAR Guide for Army Training Battle Simulation System</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1986.

Melizza, Larry, <u>Platoon Level AAR Aids in SIMNET Unit Performance Assessment System</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1992.

McFawn, H.H. and J.H. Hiller, <u>Unit Performance Measurement: Concepts, Techniques, and Examples</u>. Published paper at the Military Operations Research Society, 1988.

Scott, T.D, <u>Tactical Engagement Simulation: AAR Guidebook</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1983.

Scott, T.D, <u>AAR Guidebook I: NTC</u>. ARI Field Unit, Presidio, Monterey, Ca: 1982.

Scott, T.D, <u>How to Evaluate Unit Performance</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1984

Vincent, Gary A, <u>A New Approach to Command and Control: The Cybefnetic Domain</u>, Airpower Journal, Washington, DC: 1991.

Witmer, B.G, <u>After Action Reviews</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1990.

Word, Larry, E, <u>Observations From Three Years at the NTC</u>. ARI for Behavioral and Social Sciences, Alexandria, Va: 1987.

<u>Unpublished Dissertations, Theses, and Papers</u>

Butler, William, G. <u>How Should Brigade and Division Commanders Asses Success or Failure on the Airland Battlefield</u>? Monograph, SAMS, US Army CGSC, 1986.

Frandsen, Bert, <u>BCTP: Evaluation and Application of Airland Battle</u>. Monograph, SAMS, US Army CGSC, 1989.

Hendrickson, Ray, D. <u>Fire Support Planning Doctrine and the Decisionmaking Proces</u>. Masters Thesis, US Army CGSC, 1992.

Hutchings, Eric, D. <u>Tactical Breach Operations in Modern Warfare</u>. Masters Thesis, US Army CGSC, 1990.

Mc Cabe, Richard, L. <u>The Nature of Modern Warfare: Decisive Points in the Third Dimension</u>. Monograph, SAMS, US Army CGSC, 1988.

Todd, Robert, C. <u>An Exploration of Cohesion in the LAnd of Combat Service Support</u>. Monograph, SAMS, US Army CGSC, 1991.

Wansley, William, J. <u>American Spirit: A Leadership Philosophy for U.S. Tactical Forces</u>. Monograph, SAMS, US Army CGSC, 1991.

<u>Briefings and Interviews</u>

Aaron, COL Larry, USA, interview conducted by author while stationed at the NTC with COL Aaron from September 1988 to July 1990.

Coffey, BG, USA, briefing to the School of Advanced Military Studies (SAMS), Commanding General National Training Center (NTC), 11 September 1993.

Collins, LTC, USA, telephonic interview by author, Director Center for Army Lessons Learned (CALL), 13 December 1993.

Fisher, BG, USA, videotape of AAR philosophy viewed by author, Commanding General Joint Readiness Training Center (JRTC)

Lutz, LTC (P) Stephen, USA, interview conducted by author, Instructor SAMS, 13 December 1993.

Mc Closkey, Mr., telephonic interview conducted by author, Army Research Institute (ARI), 13 December 1993.

Mc Donough, COL James, interview conducted by author, Director SAMS, 13 December 1993.

O' Neil, COL Patrick, briefing to SAMS, Commander Operations Group (COG), NTC, 11 September 1993.